EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with John Fain (Regd. No. 60960) on 05/29/2009.

The application has been amended as follows:

The Claim listing submitted on 05/21/2009 is replaced by the following :

1. (Currently Amended)   A computer-readable storage medium including at

least one tangible component, and having stored thereon a data structure described by

an XML schema for receiving data formatted in accordance with a first version of the

data structure and for presenting the received data in an arrangement defined by the

data structure for validation by a device using a current version of the data structure,

the data structure[[,]] comprising:

at least one optional data member described in the XML schema to render the

received data functional within the current version of the data structure when optional

data is absent from the received data, wherein an optional nature of the at least one

optional data member is designated in the XML schema;

at least one construct of a first type described in the XML schema to render the

received data functional within the current version of the data structure when the

received data includes an unknown data entity that is not specified by the current

version of the data structure, wherein a limitation on a number of occurrences of the at

least one construct of the first type and a specification of the at least one construct of the first type is defined in the XML schema;

at least one construct of a second type described in the XML schema to render the received data functional within the current version of the data structure when the received data includes an optional data entity that is specified by the current version of the data structure, wherein the at least one construct of the second type tolerates an absence of the optional data entity in rendering the received data functional within the current version of the data structure, wherein a limitation on a number of occurrences of the at least one construct of the second type and a specification of the tolerance of the absence of the optional data entity of the at least one construct of the second type is defined in the XML schema; and

wherein, the at least one optional data member, the at least one construct of the first type and the at least one construct of the second type of the data structure are for receiving data formatted in accordance with the first version and for presenting the received data in an arrangement defined by the data structure for validation by the device using the current version, wherein the received data comprises data received in a Service Oriented Architecture (SOA).

2. **(Currently Amended)** The [[A]] computer-readable storage medium according to Claim 1, wherein the first version is one of plurality of versions, the plurality of versions comprising versions predating and postdating the current version.

3. **(Canceled)**

4. **(Currently Amended)** The [[A]] computer-readable storage medium according to Claim 1, wherein the at least one construct of the first type includes a delimiter followed by a wildcard data member, wherein the delimiter and a limitation on a number of occurrences of the delimiter is described in the XML schema.

    5. **(Currently Amended)** A computer-readable ~~storage~~ medium ~~including at least one tangible component, and~~ having stored thereon a data structure described by an XML schema for receiving data formatted in accordance with a first version of the data structure and for presenting the received data in an arrangement defined by the data structure for validation by a device using a current version of the data structure, the data structure[[,]] comprising:

    at least one optional data member <u>described in the XML schema</u> to render the received data functional within the current version of the data structure when optional data is absent from the received data, wherein an optional nature of the at least one optional data member is designated in the XML schema;

    at least one construct <u>described in the XML schema</u> to render the received data functional within the current version of the data structure when the received data includes wildcard data that is not specified by the current version of the data structure, wherein a limitation on a number of occurrences of the at least one construct <u>and a specification of the at least one construct</u> is defined in the XML schema;

    a delimiter which acts as a sentry to validate a beginning of the construct, wherein the delimiter and a limitation on a number of occurrences of the delimiter is described in the XML schema;

    at least one wildcard member <u>described in the XML schema</u> that follows the delimiter to receive wildcard data received in accordance with a different version of the data structure, wherein a limitation on a number of occurrences of the wildcard member and a specification of the wildcard member is defined in the XML schema; and

    wherein, the at least one optional data member, the at least one construct, and the at least one wildcard member of the data structure are for receiving data formatted in accordance with the first version and for presenting the received data in an arrangement defined by the data structure for validation by the device using the current version<u>, whereby the received data comprises data received in a Service Oriented Architecture (SOA)</u>.

6. **(Currently Amended)** The [[A]] computer-readable storage medium according to Claim 5, wherein the first version is one of plurality of versions, the plurality of versions comprising versions predating and postdating the current version.

7. **(Canceled)**

8. **(Currently Amended)** The [[A]] computer-readable storage medium according to Claim 5, wherein the different version of the data structure is one of an earlier version of the data structure and a later version of the data structure.

9. **(Currently Amended)** The [[A]] computer-readable storage medium according to Claim 5, wherein a last occurrence of the at least one wildcard member is followed by an end delimiter, wherein the end delimiter and a limitation on a number of occurrences of the end delimiter is described in the XML schema.

10. **(Currently Amended)** The [[A]] computer-readable storage medium according to Claim 5, wherein the at least one wildcard member is to be placed in a location for a schema particle.

11. **(Currently Amended)** The [[A]] computer-readable storage medium according to Claim 10, wherein a schema particle is any one of a group consisting of an element, a compositor, a group, or an element wildcard.

12. **(Currently Amended)** The [[A]] computer-readable storage medium according to Claim 10, wherein the at least one wildcard member is to receive wildcard data that is any one of a group consisting of a target namespace, a local namespace, or a global namespace.

13. **(Currently Amended)** A computer-readable ~~storage~~ medium ~~including at least one tangible component, and~~ having stored thereon one or more instructions to be executed by one or more processors, the one or more instructions causing the one or more processors to implement a method, the method comprising:

receiving data common to multiple generations of type, wherein the type refers to a format of a message file which enables a message to be encoded or decoded in a valid manner;

overcoming compatibility issues between a current generation of the type and other multiple generations of the type, the overcoming compatibility issues comprising:

tolerating an absence of optional data from the received data, when the data is received in accordance with a different generation of the type, wherein the optional data comprises a data element known by and deemed optional by the current generation of the type, wherein an optional nature of the optional data is designated in the XML schema;

specifying, in the current generation of the type, a maximum number of times optional data is allowed to appear in the received data, wherein the maximum number of times optional data is allowed to appear in the received data is specified in the XML schema;

accepting an inclusion of extra data in the received data, when the data is received in accordance with another different generation of the type, wherein the extra data comprises a data element unknown by the current generation of the type;

specifying, in the current generation of the type, a maximum number of times extra data is allowed to appear in the received data, wherein the maximum number of times extra data is allowed to appear in the received data is specified in the XML schema; and

formatting the received data according to the current generation of the type into a message; and

validating a message by inserting data elements in the received data into a data structure of the current generation of the type, whereby the received data comprises data received in a Service Oriented Architecture (SOA).

14. (Currently Amended) The [[A]] computer-readable storage medium according to Claim 13, wherein the type is described by an XML schema.

15. (Currently Amended) The [[A]] computer-readable storage medium according to Claim 13, wherein the tolerating comprises detecting no data element in an optional element member for a message.

16. (Currently Amended) The [[A]] computer-readable storage medium according to Claim 13, wherein the accepting comprises receiving the extra data in a placeholder for a message.

17. (Currently Amended) The [[A]] computer-readable storage medium according to Claim 13, wherein the current generation of the type includes at least one optional element member and at least one placeholder.

18. (Currently Amended) The [[A]] computer-readable storage medium according to Claim 16, wherein the at least one placeholder includes a delimiter followed by an element member to receive the extra data, wherein the delimiter and a limitation on a number of occurrences of the delimiter is described in the XML schema.

19. (Currently Amended) The [[A]] computer-readable storage medium according to Claim 16, wherein the at least one placeholder is to receive the further data that is any one of a group consisting of a target namespace, a local namespace, or a global namespace.

20. (Currently Amended) A computer implemented method, comprising:

receiving data in accordance with different type versions, where each of the different type versions uses a different arrangement of data within a message file to enable encoding and decoding of the received data;

overcoming compatibility issues between a current type version and other different type versions, the overcoming compatibility issues comprising:

tolerating optional data missing from the received data, when the data is received according to a different type version, wherein an optional nature of optional data and a specification of a limitation on a number of occurrences of optional data is designated in an XML schema;

~~receiving~~ accepting further data included in the received data, when the data is received according to another different type version~~, wherein a limitation on a number of occurrences of further data is designated in the XML schema~~;

specifying, in the current type version, a maximum number of times further data is allowed to appear in the received data, wherein the maximum number of times further data is allowed to appear in the received data is specified in the XML schema; and

formatting the received data according to [[a]] the current type version into a message; and

validating messages by inserting the received data into a data structure which allows the messages to be validated by the different type versions, whereby the computer implemented method is implementable in a Service Oriented Architecture (SOA).

21. (Currently Amended) [[A]] The computer implemented method according to Claim 20, wherein the further data includes the optional data.

22. (Currently Amended) [[A]] The computer implemented method according to Claim 20, wherein the type is described using the XML schema.

23. (Currently Amended) [[A]] The computer implemented method according to Claim 20, wherein the tolerating comprises allowing an absent data element in an optional data member in order to validate a message.

24. (Currently Amended) [[A]] The computer implemented method according to Claim 20, wherein the ~~receiving~~ accepting comprises ~~receiving~~ accepting the further data in a placeholder in order to validate a message.

25. (Currently Amended) [[A]] The computer implemented method according to Claim 20, wherein the current type version includes at least one optional data member and at least one placeholder.

26. (Currently Amended) [[A]] The computer implemented method according to Claim 24, wherein the at least one placeholder includes a delimiter followed by a wildcard element to receive the further data according to the another different type version, wherein further a last placeholder is followed by an end delimiter, wherein the delimiter and the end delimiter and a limitation on a number of occurrences of the delimiter and the end delimiter are described in the XML schema.

27. (Currently Amended) [[A]] The computer implemented method according to Claim 24, wherein the at least one placeholder is to ~~receive~~ accept the

further data that is any one of a group consisting of a target namespace, a local namespace, and a global namespace.

28. (Currently Amended)   A ~~parser apparatus~~ computing device, comprising:

one or more processors;

one or more memories;

instructions stored on at least one of the one or more memories and executed by at least one of the one or more processors to perform acts, the acts comprising:

~~means for~~ receiving data according to multiple different generations of type, where each different generation of type uses a different arrangement of data within a message file to enable encoding and decoding of the received data;

overcoming compatibility issues between a current generation of type and other multiple different generations of type, the overcoming compatibility issues comprising:

~~means for excusing~~ tolerating optional data being absent from the received data, when the data is received according to a different generation of the type, wherein an optional nature of optional data and a specification of a limitation on a number of occurrences of optional data is designated in an XML schema;

~~means for receiving~~ accepting further data in the received data, when the data is received according to another different generation of the type, wherein the accepting further data is facilitated by at least one construct member having a delimiter followed by a wildcard data member, wherein the delimiter, a limitation on a number of occurrences of the delimiter and a specification of a limitation on a number of occurrences of further data is designated in the XML schema; and

formatting the received data according to the current generation of type into a message;

~~means for~~ validating messages by inserting the received data into a data structure which allows the messages to be validated by the multiple different

generations of type, wherein the computing device is configured to operate in an environment that comprises a Service Oriented Architecture (SOA).

29. (Currently Amended) The ~~A parser apparatus~~ computing device according to Claim 28, wherein the type is described by the XML schema.

30. (Canceled)

31. (Currently Amended) The ~~A parser apparatus~~ computing device according to Claim 28, wherein the ~~means for receiving~~ further data is placed in a location for a schema particle.

32. (Currently Amended) The ~~A parser apparatus~~ computing device according to Claim 31, wherein the schema particle is any one of a group consisting of an element, a compositor, a group, or an element wildcard.

33. (Currently Amended) The ~~A parser apparatus~~ computing device according to Claim 31, wherein the ~~means for receiving~~ accepting further data is to ~~receive~~ accept data that is any one of a group consisting of a target namespace, a local namespace, or a global namespace.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Navneet K. Ahluwalia whose telephone number is 571-272-5636.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam T. Hosain can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Navneet K. Ahluwalia/
Examiner, Art Unit 2166

Dated: 05/29/2009

/Hosain T Alam/
Supervisory Patent Examiner, Art Unit 2166